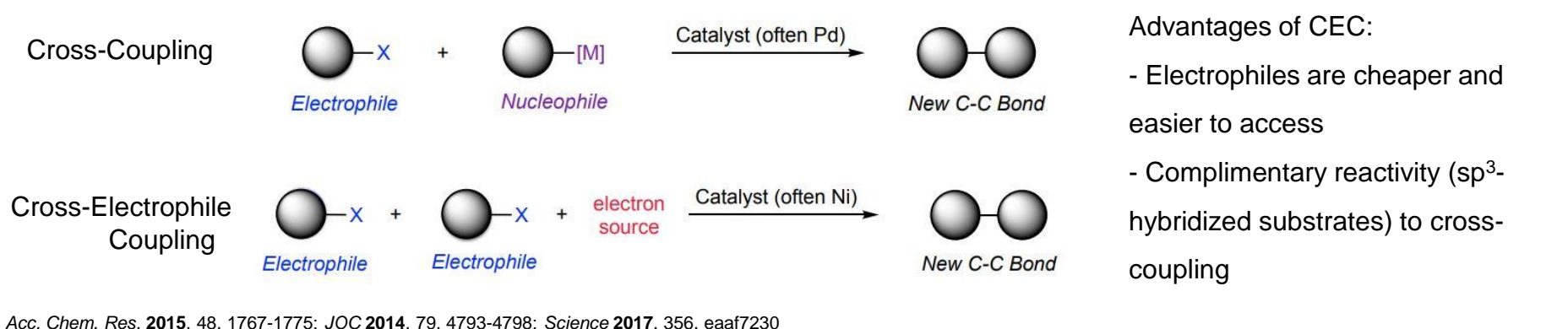


Tunable and Practical Homogeneous Organic Reductants for Cross-Electrophile Coupling

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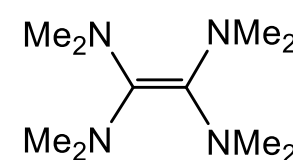


Heterogeneous reductants (Zn and Mn) are the most common electron sources for CEC

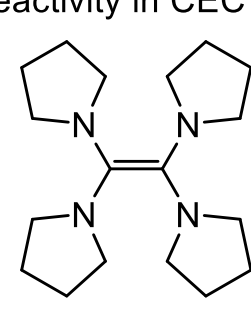
State-of-the-art organic reductant for CEC (Weix, Reisman, Nevado, others)

This work: Practical homogeneous reductants with variable E° that facilitate new reactivity in CEC

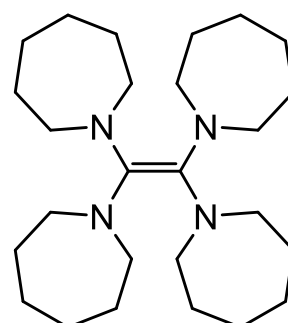
- cheap and stable under air
 - limited applications and poorly understood mechanism



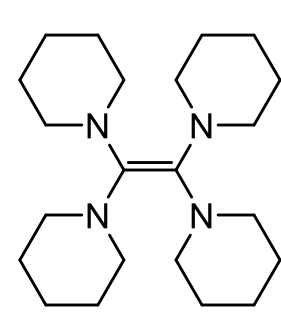
TDAE
 $E^\circ = -1.11 \text{ V}$
 Handling and storage under N_2



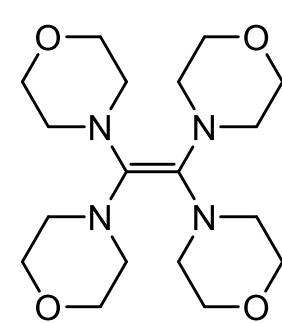
TPyE
 $E^\circ = -1.32 \text{ V}$
 Handling and storage under N_2



TAzE
 $E^\circ = -1.09 \text{ V}$
 Benchtop handling, storage under N_2



TPIE
 $E^\circ = -1.06 \text{ V}$
 Benchtop handling, storage under N_2



TME
 $E^\circ = -0.85 \text{ V}$
 Benchtop handling and storage

